

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appl. No. : **10/782,075**

Applicants : **Sean D. Monahan et al.**

Filed : **02/19/2004**

Art Unit : **1635**

Examiner : **Chong, Kimberly**

Docket No. : **Mirus.030.16.6**

For: Covalent Modification of RNA for In Vitro and In Vivo Delivery

Commissioner of Patents
PO Box 1450
Alexandria, VA 22313-1450

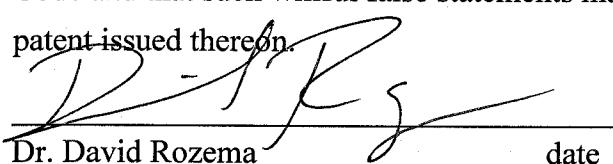
DECLARATION UNDER 37 C.F.R. §1.132

Dear Commissioner:

I, Dr. David Rozema, hereby declare as follows:

1. I have a Doctorate in Chemistry from the University of Wisconsin.
2. I am familiar with the above captioned application and Bennett et al. (U.S. Patent 6,088,344 prior art).
3. I am familiar with organic synthetic chemistry and labile bond chemistry.
4. Bennett et al. teach modified oligonucleotides, in which the oligonucleotides are modified by linkage of various groups to the 2' positions of the backbone ribose sugars of the oligonucleotides. Bennett et al. are largely silent on the method of covalent linkage of many of these various groups to the ribose 2' position. For those linkages which Bennett et al. do describe the linkage chemistry, Bennett et al. teach only unreactive ether bonds between the desired group to the oligonucleotide. These ether bonds could not be broken under conditions present in a mammal and further without also breaking other bonds in the oligonucleotide.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.


Dr. David Rozema

date

10/3/07